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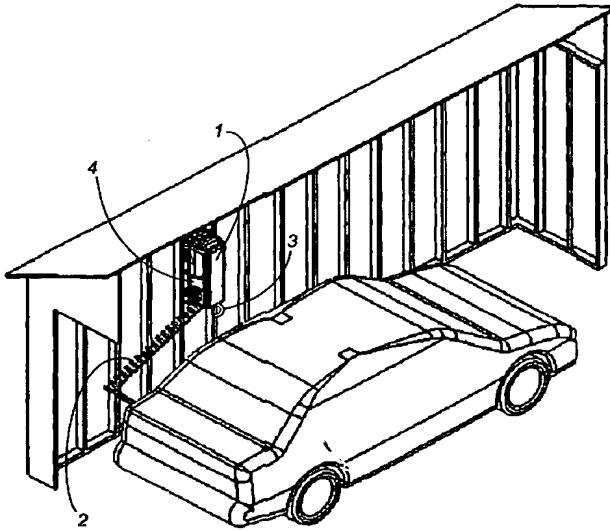
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(54) Title: GAS COMPRESSOR WITH DRIER



(57) Abstract: A gas compressor unit according to the invention includes a single gas desiccant bed and condenser (which is inactive during the compression stage) inserted into the gas flow path of the compression cycle. In the case of a multistage compressor, the single gas desiccant bed is inserted between preferably the first and second stages. Moisture absorbed into this bed is periodically removed by exposing the bed to a regeneration cycle. The regeneration cycle employed is based on the closed re-circulation of gas present in the compressor and the desiccant bed itself, as well as other gas present in the re-circulation loop when the unit suspends delivery of compressed gas. Moisture removed from the desiccant bed is condensed and preferably evaporated into the environment through a semipermeable membrane. The motor and motor controller are located with the compressor in a common casing to minimize electromagnetic emissions.

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